

CLAIMS

What is claimed is:

- 1 1. A method of processing customer interaction records within a
2 customer interaction system including:
3
4 receiving an interaction record including interaction information
5 describing a customer interaction;
6
7 identifying a cumulative record to which the interaction record
8 contributes; and
9
10 modifying the cumulative record to reflect the interaction information
11 contained within the interaction record.
- 1 2. The method of claim 1 wherein the identification of the
2 cumulative record is made utilizing time information included within the
3 interaction information of the interaction record.
- 1 3. The method of claim 1 wherein the identification of the
2 cumulative record is made utilizing data type information included within
3 the interaction information of the interaction record.

1 4. The method of claim 1 wherein the identification of the
2 cumulative record is made utilizing source information identifying a
3 customer interaction system on which the customer interaction described by
4 the interaction information occurred.

1 5. The method of claim 1 wherein the identification of the
2 cumulative record includes constructing a key, utilizing the interaction
3 information, that is mapped to the cumulative record.

1 <sup>sub
a1</sup> 6. The method of claim 1 wherein the cumulative record is
2 identified from among a plurality of cumulative records, each of the
3 plurality of cumulative records comprising a row of a result set that includes
4 a plurality of columns, each column specify a data operation that determines
5 how a cumulative record including an entry corresponding to the relevant
6 column is modified to reflect interaction information contained within an
7 interaction record.

1 7. The method of claim 1 wherein the interaction information
2 included within the interaction record comprises a plurality of information
3 items, and the modification of the cumulative record comprises performing
4 a data operation with respect a processed information items included within
5 the cumulative record corresponding to at least one information item
6 included within the interaction record.

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1 8. The method of claim 7 wherein the cumulative record
2 comprises a plurality of processed information items, each of the processed
3 information items being assigned to a respective column within a result set
4 constituting a plurality of cumulative records, each of the respective
5 columns of the result set having a respective data operation associated
6 therewith.

1 9. The method of claim 8 wherein a data operation associated
2 with a respective column comprises any one of a group of operations
3 including a sum operation, a "count if" operation, a copy operation, and a
4 "replace if" operation.

1 10. The method of claim 1 wherein the cumulative record contains
2 interaction information derived from a plurality of interaction records for a
3 predetermined time period.

1 11. The method of claim 10 wherein the cumulative record is
2 stored within a database as part of a summarization record of customer
3 interactions over the predetermined time, the summarization record
4 comprising a plurality of cumulative records.

1 12. The method of claim 1 wherein the interaction information
2 includes any one of a group of information items comprising source, data,
3 time, call segment, response time, wait time, queue time, hold time and talk
4 time.

1 13. The method of claim 1 wherein the customer interaction
2 system comprises any one of a group of systems including an automatic call
3 distributor, an e-mail server, a web server, a computer telephony integration
4 server and an interactive voice response server.

14. A process for processing customer interaction records within a
2 customer interaction system, of the process including:

3
4 a first process to receive a first record including interaction
5 information describing a customer interaction and to identifying a
6 cumulative record to which the first record contributes; and
7
8 a second process to modifying the cumulative record to reflect the
9 interaction information contained within the first record.

1 15. The process of claim 14 wherein the first process identifies the
2 cumulative record utilizing time information included within the interaction
3 information of the interaction record.

1 16. The process of claim 14 wherein the first process identifies the
2 cumulative record utilizing data type information included within the
3 interaction information of the interaction record.

1 17. The process of the claim 14 wherein the first process identifies
2 the cumulative record utilizing source information identifying a customer
3 interaction system on which the customer interaction described by the
4 interaction information occurred.

1 18. The process of claim 14 wherein the first process constructing a
2 key, utilizing the interaction information, that is mapped to the cumulative
3 record to identifying the cumulative record.

1 19. The process of claim 14 wherein the first process identifies the
2 cumulative record from among a plurality of cumulative records, each of the
3 plurality of cumulative records constituting a row of a result set that
4 includes a plurality of columns, each column specify a data operation that
5 determines how a cumulative record including an entry corresponding to
6 the relevant column is modified to reflect the interaction information
7 contained within the interaction record.

1 20. The process of claim 14 wherein the interaction information

2 included within the interaction record comprises a plurality of information
3 items, and the second process modifies the cumulative record by performing
4 a data operation with respect a processed information items included within
5 the cumulative record corresponding to at least one information item
6 included within the interaction record.

1 21. The process of claim 20 wherein the cumulative record
2 comprises a plurality of processed information items, each of the processed
3 information items being assigned to a respective column within a result set
4 constituting a plurality of cumulative records, each of the respective
5 columns of the result set having a respective data operation associated
6 therewith that constitutes part of the second process.

1 22. The process of claim 20 wherein a data operation associated
2 with a respective column comprises any one of a group of the operations
3 including a sum operation, a "count if" operation, a copy operation, and a
4 "replace if" operation.

1 23. The process of claim 14 wherein the cumulative record
2 contains interaction information derived from a plurality of records for a
3 predetermined time period.

1 24. The process of claim 23 including a third process that stores the

2 cumulative record within a database as part of a summarization record of
3 customer interactions over the predetermined time, the summarization
4 record comprising a plurality of cumulative records.

1 25. The process of claim 14 wherein the interaction information
2 includes any one of a group of information items comprising source, data,
3 time, call segment, response time, wait time, queue time, hold time and talk
4 time.

1 26. The process of claim 14 wherein the customer interaction
2 system comprises any one of a group of systems including an automatic call
3 distributor, an e-mail server, a web server, a computer telephony integration
4 server and an interactive voice response server.

1 27. A machine-readable medium that stores a sequence of
2 instructions that, when executed by a machine, cause the machine to
3 perform a method of processing customer interaction records within a
4 customer interaction system, the method including the steps of:
5
6 receiving a record including interaction information describing a
7 customer interaction;
8
9 identifying a cumulative record to which the first record contributes;

